

ABSTRACT

[0028] Supported stereospecific catalysts and processes for the stereotactic propagation of a polymer chain derived from ethylenically unsaturated monomers such as the polymerization of propylene to produce syndiotactic polypropylene or isotactic polypropylene. The supported catalyst comprises a stereospecific metallocene catalyst component and a co-catalyst component comprising an alkylalumoxane. Both the metallocene catalyst component and the co-catalyst component are supported on a particulate polyorganosilsesquioxane support comprising spheroidal particles of a polyorganosilsesquioxane having an average diameter with the range of 0.3-20 microns. The polyorganosilsesquioxane support is characterized by relatively low surface area, specifically a surface area less than 100 square meters per gram. The metallocene component can take the form of a single metallocene or two or more metallocenes which are co-supported on the polyorganosilsesquioxane support.